

PARKANYI, C

5

✓ The mercaptoquinazolone series. I. Desulfuration of 2-thio-4-quinazolones with Raney nickel. Cyril Parkányi and Alois Vysřil (Charles Univ., Prague), *Chem. Listy* 50, 100-101 (1956). — Raney Ni desulfuration of 3-substituted-2-mercapto-4(3H)-quinazolones (substituent = R) (I) gave 3-substituted-4(3H)-quinazolones (II). I (R = H) (III) (0.01 mole), prepd. in 24% yield by heating KSCN and *o*-MeO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>·HCl 6 hrs., m. 298°, refluxed and stirred 3 hrs. with 15 g. Raney Ni W<sub>2</sub> in 400-500 ml. EtOH gave 92% II (R = H), m. 210-12° (from H<sub>2</sub>O), also obtained in 28.5% yield by desulfuration of 2-methylmercapto-4(3H)-quinazolone (prepd. in 71% yield from III and MeI), m. 213° (from MeOH). I (R = Ph) (IV), m. 299°, was prepd. according to Freundler [*Bull. soc. chim. France* (3), 31, 832 (1904)] in 95% yield. IV with MeI in alc. KOH gave 82.5% 2-Me thioether (V), m. 128° (from EtOH-H<sub>2</sub>O). Heating 4.3 g. KOH in 80 ml. 50% EtOH and 17.5 g. IV on the steam bath, dilg. with 80 ml. EtOH and 10 ml. H<sub>2</sub>O, adding 9 g. PhCH<sub>2</sub>Cl, heating 30 min., filtering, and allowing the filtrate to stand 3 days gave 23.5 g. 2-benzyl thioether (VI), m. 109.5° (from AcOH). Desulfuration of IV, V, and VI gave II (R = Ph), n. 138-9° (from C<sub>6</sub>H<sub>6</sub>), in 80, 61, and 59% yields, resp. Refluxing 8.5 g. *o*-HO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>, 150 ml. EtOH, and 9.23 g. PhCH<sub>2</sub>NCS (b.p. 140-2°) 3 hrs., allowing the mixt. to stand 1 day, and evapg. the mother liquors gave 4.75 g. I (R = PhCH<sub>2</sub>) (VII), m. 216-7° (from EtOH); desulfuration yielded 57% II (R = PhCH<sub>2</sub>), m. 115.5-16.5° (from AcOH-petr. ether). Ultraviolet spectra are given for II (R = H), III, IV, and VII.

M. Hudlicky

PARKANYI, C.

5-  
88

✓ The mercaptopyrazolone series. III. Synthesis and desulfuration of 1-methyl-2-mercapto-3-phenyl-1,2-dihydroquinazol-4-one. C. Parkányi and A. Vysatčí (Charles Univ., Prague). *Chem. Zvesti* 50, 666-7 (1956); cf. preceding abstr. Refluxing 2.5 g. 3-MeNHC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H with 2.25 g. PhNCS 6 hrs. in 50 ml. AcOH yielded 3.2 g. 1-methyl-2-mercapto-3-phenyl-1,2-dihydroquinazol-4-one (I), yellow crystals, m. 278° (from C<sub>6</sub>H<sub>6</sub>). 1 (1 g.) boiled with 400 ml. EtOH and 5.5 g. Raney-Ni W4 gave 0.4 g. 1-methyl-3-phenyl-1,2-dihydroquinazol-4-one, m. 115° (from CHCl<sub>3</sub>-ligroine); picrate, m. 132°. L. J. Urbánek

(2)

AB

PARKANYI, CYRIL

3

Polarography of derivatives of urea and thiourea. X.  
Anodic depolarization in solutions of 3-substituted 2-thio-  
4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolines. Cyril Parkany  
(1954; *Ch. L. A. 51, 1132h*; *Chem. Abstr. 51, 703-1b*)  
studied polarographically: 2-thio-3-phenyl-4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolinol (I); 2-thio-3-(*p*-methyl-  
phenyl)-4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolinol (II); and  
2-thio-3-(*p*-carboxyphenyl)-4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolinol (III). These compds. give anodic polarographic  
wave which are complicated by various adsorption effects in buffer solns. and in the solns. of alkali hydroxides.  
The behavior of I differs substantially from the 2 others.  
The polarographic behavior of II and III is very similar and  
under certain conditions analogous to that of thiobarbituric  
acids and 4-methyl-2-thiouracil.  
P. Stráfelda

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and  
Application. Food Processing Industry.

H-28

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 59109

Author : Parkanyi Cyril

Inst : -

Title : Polygraphic Method of Determining the Content of  
Benzaldehyde in Compoto Syrup.

Orig Pub : Prumysl potraviny, 1958, 9, No 2, 111-112.

Abstract : Benzaldehyde is distilled from syrup with aqueous  
steam and it is identified in the distillate by the  
polygraphic method.

Card 1/1

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and Their      H-16  
Application. Industrial Synthesis of Dyes.

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 16460

Author : Parkanyi, C.

Inst : Not given

Title : Capillary Analysis of Certain Synthetic Dyes

Orig Pub : Priroda potraviny, 1958, 9, No 4, 200-201

Abstract : Description of capillary analysis conducted on square  
sheets of blotting paper for identification of food dyes  
and for the determination of their purities. -- V. Ufimov

Card 1/1

H - 44

PARKANYI, C.

"Nonisotopic radioactive indicators in analytic chemistry."

p. 181 (Chemie, Vol. 10, no. 3, Mar. 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,  
September 1958

PARKANYI, C.

"Progress in organic synthesis. VI."

p. 207 (Chemie, Vol. 10, no. 3, Mar. 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,  
September 1958

PARKANYI, C.

"Share of individual states and languages in the publications on organic chemistry."

p. 234 (Chemie, Vol. 10, no. 3, Mar. 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,  
September 1958



*PARKANYI, CYRIL*

CZECHOSLOVAKIA / Physical Chemistry/ Electrochemistry.

B-12

~~Abstr Jour~~ : Ref Zhur - Khim., No 10, 1958, No 31895

Author : Cyril Parkanyi

Inst : -

Title : Polarography of Urea and Thiourea Derivatives. X. Anode Depolarization in Solutions of 3-Substituted 2-Thioxo-4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolines.

Orig Pub : Chem. listy, 1957, 51, No 4, 709-715; Collect. Czechosl. chem. commun., 1958, 23, No 1, 63-70

Abstract : The polarographic behavior of 2-thioxo-3-phenyl-4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolino (I), 2-thioxo-3-n-methylphenyl-4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolino (II) and 2-thioxo-3-n-methoxyphenyl-4-oxo-1,2,3,4,5,6,7,8-octahydroquinazolino (III) was studied in alkaline buffer solutions and in solutions of alkali metal hydroxides. The anodic waves corresponding to the formation of Hg salts are complicated by adsorption phenomena. It was established that the

Card 1/2

GUT, J.; MORAVEK, J.; PARKANYI, C.; SKODA, J.; SORM, P.

Nucleic-acid components and their analogues. III. Antimicrobial effect of some pyrimidine analogues and related compounds. In English. Coll.Cz.Chem. 24 no.9:3154-3162 S '59. (EEA1 9:5)

1. Department of Organic Synthesis and Department of Biochemistry, Institute of Chemistry, Czechoslovak Academy of Science, Prague.
  2. Institute for Research, Production and Utilization of Radioisotopes, Prague (for Moravek).
- (Nucleic acids)                      (Pyrimidine)

PARKANYI, C.

"Organic syntheses with isotopes" by A.Murray and D.L.Williams.  
Part 1: "Compounds of isotopic carbon". Part 2: "Organic compounds labeled with isotopes of the halogens, hydrogen, nitrogen, oxygen, phosphorus, and sulfur". Reviewed by C.Parkanyi. Coll Cz Chem 27 no.5:1352-1354 My '62.

ZAHRADNIK, R.; PARKANYI, C.; KOUTECKY, J.

Physical properties, reactivity and the MO-LCAO study of  
thiopyrones and related compounds. Coll Cz Chem 27 no.5:  
1242-1253 My '62.

1. Institute of Industrial Hygiene and Occupational Diseases  
(for Parkanyi and Koutecky). 2. Institute of Physical Chemistry,  
Czechoslovak Academy of Sciences, Prague (for Zahradnik).

SKODA, J.; ČIHÁK, A.; GUT, J.; PRYSTAS, M.; PISKALA, A.;  
PARKANYI, C.; SORM, F.

Nucleic acid components and their analogues. Part 23:  
Inhibition of growth of *Escherichia coli* by derivatives of  
pyrimidine, 5-azauracil, 6-azauracil and some simpler  
models of these derivatives. Coll Cz Chem 27 no.7:1736-1743  
Jl '62.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Sciences, Prague. 2. Institute of Physical Chemistry,  
Czechoslovak Academy of Sciences, Prague (for Parkanyi).

PARKANYI, C.; ZAHRADNIK, R.

Reactivity and polarography of thiopyrones. Coll Cz Chem  
27 no.6:1355-1368 Je '62.

1. Institute of Physical Chemistry, Czechoslovak Academy  
of Sciences, Prague.

ZAHRADNÍK, R; FARKANYÍ, C; HORÁK, V; KOUTECKÝ, J.

Institute of Physical Chemistry, Czechoslovak  
Academy of Science -- Prague; Department of  
Organic Chemistry, Charles University -- Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications,  
No 4, 1963, pp 775-794

"Study of the Reactivity of Sulphur Heterocycles."

11

PISKALA, A.; GUT, J.; SORM, F.; PRISTAS, M.; PARKANYI, C.

Nucleic acids components and their analogues. Pts. 34-38.  
Coll Cz Chem 28 no.9:2365-2380, 2491-2509, 2527-2529. S '63.

1. Institute of Organic Chemistry and Biochemistry,  
Czechoslovak Academy of Sciences. Prague (for all except  
Parkanyi).
2. Institute of Physical Chemistry, Czechoslovak Academy of  
Sciences, Prague (for Parkanyi).



ZAHRADNIK, R.; PARKANYI, C.; HORAK, V.; KOUTECKY, J.

Experimental and theoretical study of the reactivity and spectral properties of sulfur heterocycles derived from alternant hydrocarbons. Coll Cz Chem 28 no.4:776-798 Ap '63.

1. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague, and Department of Organic Chemistry, Charles University, Prague.

KREPINSKY, Jiri; PARKANYI, Cyril

Rare reactive inert gases. Chem listy 57 no. 12:  
1233-1242 D '63.

1. Ustav organicke chemie a biochemie, Ceskoslovenska  
akademie ved a Ustav fysikalni chemie, Ceskoslovenska  
akademie ved, Praha.

PARKANYI, C.; ZAHRADNIK, R.

Physical properties and chemical reactivity of alternant hydrocarbons and related compounds. Pt. 4. Coll Cz Chem 29 no.4:973-982 Ap '64.

1. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague.

PARKANYI, C.; HORAK, V.

Seminars "Quantum chemistry" and "Physical methods for  
determining the structure of substances." Chemistry  
58 no.1:61-62 Ja'64.

PARKANYI, C.

Another symposium in 1965. Chem listy 59 no.3:363-364. Mr '65.

CZECHOSLOVAKIA

PAEKANYI, C., ZAHRAJNIK, R.

Institute of Physical Chemistry, Czechoslovak Academy of Sciences,  
Prague - (for both).

Prague, Collection of Czechoslovak Chemical Communications, No 12,  
December 1965, pp 4287-4296

"Physical properties and chemical reactivity of alternant hydro-  
carbons and related compounds. Part 9: Anodic oxidation of deriva-  
tives of benzenoid hydrocarbons."

(For the 75th birthday of Academician J. Heyrovsky).

CZECHOSLOVAKIA

PARKANYI, C.; HORAK, V.; PECKA, J.; ZAHRAINIK, R.

1. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague;
2. Dept. of Organic Chemistry, Karlova Univ., Prague (for ?)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb 1966,  
pp 835-851

"Physical properties and chemical reactivity of alternant hydrocarbons and related compounds. Part 10: An experimental and theoretical study of benzol derivatives of benzenoid hydrocarbons and some oxygen- and sulfur-containing heterocyclic analogues." (Presented at the Symposium on the Chemistry of Organic Sulfur Compounds, Liblice near Prague, June 15-17, 1964, and at Chemiedozententagung, Berlin, September 2-5, 1964.)

(3)  
CZECHOSLOVAKIA

HOCHMANN, P; JUBSKY, J; KOUTECKY, J; PALLANYI, G.

Institute of Physical Chemistry of the Czechoslovak Academy  
of Sciences, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications,  
No 10, 1965, pp 3560-3565

"Tables of Quantum Chemical Data. VIII. Energy Characteristics  
of Some Benzene Hydrocarbons."



, ; A K I, .

1. The first of the two main parts of the report is a description of the  
of the first part, the first part of the report.

2. The second part of the report is a description of the  
of the second part, the second part of the report.

3. The third part of the report is a description of the  
of the third part, the third part of the report.

HORAK, V.; PARKANYI, C.

"Organic chemistry of bivalent sulfur" by E. Emmet Reid.  
Reviewed by V. Horak, C. Parkanyi. Chem listy 58 no. 11: 1356-  
1357 N '64.

PARKANYI, C.

Nomenclature of organic molecules containing labeled atoms.  
Chem listy 58 no.11. 1253-1285 N '64.

ZAHRADNIK, R.; PARKANYI, G.

Physical properties and chemical reactivity of alternant hydrocarbons and related compounds. Pt.8. Coll Cz Chem 30 no.2:355-379 F '65.

1. Institute of Physical Chemistry of the Czechoslovak Academy of Sciences, Prague. Submitted June 29, 1964.

POSCH, Elek; SIMON, Gyorgy; PARKANYI, Ferenc.

Absorption of substances labelled with various radioactive isotopes in experimental intestinal obstruction. Kiserl. orvostud. 16 no.2:174-177 Ap'64

1. Budapesti Orvostudományi Egyetem Kóreltani Intézete.

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PARKANYI, K.

Study of thioquinazolone series. Part 5. N-methyl derivatives of 2,4-dioxo- and 2-thioxo-4-oxo-1,2,3,4-tetrahydroquinazoline. Coll Cz Chem 26 no.4:998-1001 Apr '61.

1. Institut organické chemie a biologie, Československá akademie věd, Praha.

(Quinazoline)

PARKANYI, Laszlo

Rotary motion of rigid bodies. Fiz szemle 15 no.3:92-96 Mr '65.

1. Chair of Experimental Physics of the Lorand Eotvos University,  
Budapest.

TARKENT, L.

Demonstration of induced tension by means of a condensation electroscope.

P. 84 (FISICAL SCIENCE) Budapest. Vol. 7, No. 2/3, Apr./June 1957.

SO: Monthly Index of East European Accessions (AMEI) Vol. 6, No. 11 November 1957.



PARKANYI, Laszlo

Diffraction on optical grating. Fiz szemle 13 no.9:279-287  
S '63.

1. Eotvos Lorand Tudományegyetem Kísérleti Fizikai Tanszék.

PARKANYI, Laszlo

Explanation of the phenomena in conjunction with accelerating liquids without applying the theory of the forces of inertia.  
Fiz szemle 12 no.8:252-254 Ag '62.

1. Fovarosi Pedagogiai Szeminarium.

HUNGARY/Electricity - General

Abs Jour : Ref Zhur - Fizika, No 11, 1958, No 25449

Author : Perkany László

Inst : Not given

Title : Observation of the Induction emf with the Aid of an  
Electroscope.

Orig Pub : Fiz. szorle, 1957, 7, No 2-3, 84-85

Abstract : No abstract

Card : 1/1

PARKANYI, Laszlo

Detection of induced voltage by means of condensing electro-  
scope. Fiz szemle 7 no.2/3:84-85 Ap-Je '57.

1. Pedagógiai Főiskola, Pécs.

BRUCKNER, Gyorgyi; PARKANY, Mihaly

Photometric determination of phenarsazine derivatives.  
Magy kem folyoir 68 no.4:164-166 Ap '62

1. Neheztvegyipari Kutato Intezet, Budapest.

PARKASIEWICZ, Tadeusz

Electric switch point heating devices as means of easing  
traffic difficulties of the Polish State Railroads during  
the winter season. Przegl kolej elektrotech 15 no. 8:  
238-239 Ag '63.



PARKER, A.Dzh. [Parker, A.J.]; OKHLOBYSTINA, L.V. [translator]

Effect of solvation on the properties of anions in dipolar aprotic  
solvents. Usp.khim. 32 no.10:1270-1295 0 '63. (MIRA 16:12)



12

CA

1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES UNDER

An industrial application of nitrogen tri-chloride. H. K. PARKER. *Proc. 1st Intern. Conference on Flour and Bread Manuf. in Prague 1927, 147-52 (1929)*.—NCl<sub>3</sub> is an efficient bleaching agent and also causes artificial aging in flour. Preliminary expts. show no change, due to such treatment, in H-ion concn., titrable acidity, water-sol. N, water-sol. solids, ash, protein, reducing sugars or enzyme content. Bleaching may be due to oxidation or chlorination of the carotene in flour. The artificial aging may have its explanation in processes of oxidation, in changes in the colloidal nature of the gluten or in the breaking down of starch aggregates, thus making the yeast reaction more effective.

N. M. NAVLON

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

FAY, B.

I obtained a number of copies of the report in 1964. In 1965, I obtained  
a copy of the report in 1965, and in 1966, I obtained a copy of the report.

11: I obtained a copy of the report in 1965, and in 1966, I obtained a copy of the report.  
12: I obtained a copy of the report in 1965, and in 1966, I obtained a copy of the report.

PARKER, R.

Czechoslovak Grand Prize. p. 15. (AUTO MOTOR, Budapest, Hungary),  
Vol. 7, No. 18, Sept. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 5, May 1955, Uncl.

PARKER, V.

~~CONFIDENTIAL~~

British workers take up the battle. Vsem.prof.dvizh. no.1:9-12  
Ja '54. (MLRa 7:1)

1. Chlen natsional'nogo komiteta Ob'yedinennogo profsoyuza mashi-  
nostroiteley, chlen rayonnogo komiteta profsoyuza v YUzhnom  
London i odin iz rukovoditeley tsekhovykh starost.

(Great Britain--Trade unions) (Trade unions--Great Britain)

PARKES, D. V.

B. H. PERRY, BIOS, Item 22, Fin. Rep. 572, HMSO: Chem. Tr. J., 25, Oct. 1946  
119, 489-490

GEBICKI, Zbigniew, mgr inż.; PARKETNY, Edmund mgr inż.

Mining thin coal seams by boring. Przegl gorn 20 no.3:102-105 Wr '64.

PARKHANOV, M.N.

Stratigraphy of ancient formations in the western slope  
of the Polar Urals. Mat. po geol. i pol. iskop. Sev.-Vost.  
Evrop. chasti SSSR. no.2:7-16 '62. (MIRA 15:11)  
(Ural Mountain region--Geology, Stratigraphic)

PARKHAYEV, V.

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Ball unit for slaking lime. Stroitel' no.1:9 Ja '57. (MLRA 10:2)

(Limp)



KHAYKIN, A.M.; PARKHEYAN, K.S.

Efficacy of the use of glass reinforced plastics in electric  
equipment. Plast. massy no.10:40-42 '65. (MIRA 18:10)

PARKHILOVSKIY, A., inzh.

Prices cut in half. Obshchestv.pit. no.12:28 D '58.

(MIRA 11:12)

1. Upravleniye obshchestvennogo pitaniya Ministerstva trgovli RSFSR.  
(Voronezh--Restaurants, lunchrooms, etc.)

ZAKHAROV, V.I.; DEMENT'YEVA, M.L.; KAZENNOVA, A.R.; PARKHILOVSKIY, A.I.;  
VAGANOVA, N.A., red.; BRODSKIY, M.P., tekhn. red.

[Public food service in the R.S.F.S.R.] Obshchestvennoe pitanie v  
RSFSR. Moskva, Gos. izd-vo torg. lit-ry, 1961. 115 p.

(MIRA 14:11)

(Restaurants, lunchrooms, etc.)

PARMILIA, L., Engineer

Mr., Vladimir Molotov (-1211-)

"Determination of the Direction of the Required Binding  
Wheel for Sharpening Round Rods," Journal of Instruments,  
16, Nos. 10-11, 1961.

BR-5-10-19

PARKHILOVSKIY, I. G.

IA 12T32

USSR/Springs - Strains  
Springs - Stresses

Sep/Oct 1946

"Determining the Static Forces of a Bent Spring,"  
I. G. Parkhilovskiy, 3 pp

"Avtomobil'naya Promyshlennost'" No 9/10

Discussion of and formulae for determining static  
forces of bent springs.

12T32

PARSHILOVSKIY, I. G.

"Investigation of the Influence of Auto-Excitation  
Basic Design Parameters on the Dynamics of  
Steering and Suspension Systems." Dissertation  
degree of Cand. Technical Sci. Subdiv. 15.1,  
Moscow Automotive Mechanic Inst.

Summary 02, 17 Dec 68, Dissertation Presented  
For Degrees in Science and Engineering in 1968  
1969. From Tekhnicheskaya Mekhanika, Jan-Feb 1969.

SVFSPNIVCV, D.A., ARENILOVICH, I.G.

Metals - Finishing

The effect of shot blasting on the change in the curvature of sprin. leafs.  
Avt. trakt. prom., No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ June <sup>1952</sup>~~1953~~, Uncl.

**USSR/ Engineering - Automotive springs**

**Card 1/1**    **Pub. 128 - 3/26**

**Authors**    : Parkhilovskiy, I. G., and Buynov, A. F.

**Title**       : Spring profiles for special sections and the advantage of their application

**Periodical** : Vest. mash. 2, 19-25, Feb 1954

**Abstract**   : Operational tests were conducted by the Molotov Automobile Plant in Gorkiy, to determine the causes of damage and breaking of suspension springs used on automotive equipment. The shortcomings of the above mentioned equipment are briefly described, and some new improved designs of suspension springs are presented. Nine USSR references (1950-1953). Graph; drawings; illustrations.

**Institution** : .....

**Submitted**   : .....



PARKHILOVSKIY, I.G., kandidat tekhnicheskikh nauk.

Theoretical basis in the design of automobile suspension with nonlinear elastic characteristics. Avt.trakt.prom. no.2:15-21 Fe '55.  
(MIRA 8:4)

1. Gor'kovskiy avtozavod im. Molotova.  
(Automobiles--Design and construction)

BUYNOV, A.F., inzhener; BRAYCHEV, V.P., inzhener; PARKHILOVSKIY, I.G.,  
inzhener; SVESHNIKOV, D.A., inzhener.

Determining the endurance limits of spring steel in the presence  
of contact stresses. Vest.mash. 35 no.12:51-55 '55. (MLRA 9:5)

1. Gor'kovskiy avtomobil'nyy zavod imeni Molotova.  
(Springs (Mechanism))

PARKHILOVSKIY, I.G., kandidat tekhnicheskikh nauk; USPENSKIY, I.N.,  
kandidat tekhnicheskikh nauk.

Determining the curve radius of brake spring leaves in the free  
state. Avt.1 trakt.prom. no.4:18-22 Ap '56. (MLRA 9:8)

1. Gor'kovskiy avtozavod imeni Molotova, Gor'kovskiy politekhniches-  
skiy institut imeni Zhdanova.

(Brakes)

PARKHILOVSKIY, I.G., kandidat tekhnicheskikh nauk.

~~\_\_\_\_\_~~  
Pneumatic and hydropneumatic suspensions of automobiles.  
Avt.i trakt.prom. no.3:9-14 Mr '57.

(MLRA 10:5)

1. Gor'kovskiy avtozavod imeni Molotova.  
(Automobiles--Shock absorbers)

PARKHILOVSKIY, I.G., kand.tekhn.nauk; ZAYTSEVA, N.F.

Using an electronic analog computer in statistical investigations  
of motor-vehicle vibrations. Avt.prom. 30 no.1:9-14 Ja '64.  
(MIRA 17:3)

1. Gor'kovskiy sel'skokhozyaystvennyy institut i Gor'kovskiy  
avtozavod.

PARKHILOVSKIY, I.G., kand.tekhn.nauk

Spectral density of roughness distribution on the highway  
microprofile and the vibration of automobiles. Avt.prom. 27  
no.10:25-28 0 '61. (MIRA 14:10)

1. Gor'kovskiy avtozavod.

(Automobiles--Vibration)

(Roads)

12(2)

SCV/113-59-4-10-19

AUTHOR: Parkhilovskiy, I.G., Candidate of Technical Sciences

TITLE: The Influence of the Equalizing Suspension on Body Oscillations During the Motion of an Automobile

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 4, pp 24-32 (USSR)

ABSTRACT: In the preceding paper (published in Avtomobil'naya promyshlennost', 1959, Nr 3), the author considered the influence of the equalizing suspension on the self-oscillations of an automobile. In this paper, the author investigated the motion of an automobile over one single unevenness, over periodic unevennesses and the work of the equalizing suspension during static load changes occurring during the stopping and acceleration of an automobile. Usually, various assumptions are made for simplifying the investigations of the equations for automobiles with conventional suspensions. For example, when calculating the shock absorbers, the mass distribution factor is frequently taken as  $\xi = 1$ . In this paper no such assumptions were made, because here the problem is not simplified when assuming that  $\xi = 1$ , since an elastic tie will still

Card 1/3

3GV/113-59-4-10/19

The Influence of the Equalizing Suspension on Body Oscillations during the Motion of an Automobile

remain between the generalized coordinates whose influences must be investigated. Assuming the absence of shock absorbers in the suspension would simplify the problem to a considerable extent, but this is not possible, since hydraulic shock absorbers are installed in all automobiles with equalizing suspension. In his conclusions, the author states that the equalizing suspension has essential disadvantages, consisting in a resistance reduction against direct-axis inclinations of the body with increasing tie rigidity, caused by a static load re-distribution during the stopping and acceleration of the automobile. Special automatic compensators may be used for reducing the aforementioned body inclination, but their design is complicated and expensive. The author mentions in this connection the French Citroen 2CV and the American 1955 Packard. The calculation methods explained by the author may be used for determining the influence of the equalizing suspension on the parameters characterizing smoothness of ride for each automobile with a given mass distribution

Card 1/3



SOV/113-55-1-10 19

The Influence of the Equalizing Suspension on Body Oscillations During the Motion of an Automobile

and base, by comparing them with the same parameters of an automobile equipped with a conventional suspension. The parameters used for such a comparison are normal frequency, amplitude and acceleration of angular and vertical body oscillations. When planning an automobile with an equalizing suspension, one may determine those rigidity conditions of the suspension which will provide an optimum smoothness of ride of the automobile. The formulas necessary for such calculations are contained in 2 tables. There are 2 diagrams, 2 graphs, 4 tables and 6 Soviet references.

ASSOCIATION: Gor'kovskiy avtozavod (Gor'kiy Automobile Plant)

Card 3/3

12(2)

SCV/113-59-7-8/17

AUTHOR: Parkhilovskiy, I.G., Candidate of Technical Science

TITLE: Free Oscillations of an Automobile With Equalizing Suspension (Svobodnyye kolebaniya avtomobil'nykh uravnitel'noy podveskoy)

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 3.  
pp 20 - 26 (USSR)

ABSTRACT: The author investigated the free oscillations of an automobile with equalizing suspension, citing the French Citroen 2CV and a Packard suspension as examples. In his work, the author considered the influence of the equalizing suspension on the smoothness of movement of an automobile, on which an elastic connection was established only between the right and left wheels. For the mathematical investigation simple models were used, reflecting the functioning principle of the suspension independently of its design. Figure 4 shows two of these models. First, the author presents general differ-

Card 1/4

SOV/113-59-3-8/17

Free Oscillations of an Automobile With Equalizing Suspension

ential equations for oscillations using as a model the equalizing suspension as shown by Figure 5. Then, he develops equation sets for free oscillations, assuming for simplicity that there are no shock absorbers installed. In the concluding part, the results of comparative calculations are represented in one table and six graphs (Figures 1 - 6). Thereby, data was selected in such a way that it were similar to that of the GAZ-12. Comparisons were made for symmetrical and asymmetrical automobiles, whereby in each category a vehicle with a conventional suspension was compared with one having an equalizing suspension. The author comes to the conclusion that the presence of an elastic tie between the wheels of an automobile introduces into the calculations of the suspension a new parameter (rigidity of the tie) which permits the change of parameters of the oscillatory system of an automobile within wide ranges. Partially, this parameter helps to select the other parameters in such a manner

Card 2/4

SOV/113-59-3-2/17

Free Oscillations of an Automobile With Equalizing Suspension

that the optimum smoothness of ride is obtained. According to the equations for an automobile with a conventional suspension, in the general case, when moving on an uneven road of arbitrary profile, the normal frequencies of the oscillations  $\Omega_1$  and  $\Omega_2$  must be close to each other and must have small magnitudes for a great smoothness of ride. The same are required for an equalizing suspension and in the latter case they are easily achieved, while they are practically impossible to perform on vehicles with a conventional suspension. Complying with the necessary conditions when designing an automobile with conventional suspension requires that the mass distribution factor be close to 1 or even larger. This may be achieved only by a small wheel base whereby the operational properties of such a

Card 3/4

SOV/113-50-4-8/10

Free Oscillations of an Automobile With Equalizing Suspension

vehicle deteriorate, for example the controllability and stability. There are 5 diagrams, 8 graphs and 8 Soviet references.

ASSOCIATION: Gor'kovskiy avtozavod (Gor'kiy Automobile Plant)

Card 4/4

*PARKHILOVSKIY, M. G.*

EOV/128-59-4-21/2

AUTHOR: Qualitser, M.L.

TITLE: An All-Union Research and Technical Meeting on Car Suspensions (Vsesoyuznoye nauchno-tekhnicheskoye soveshchaniye po podveskam avtomobiley)

PERIODICAL: Kauchuk i Rezina, 1959, Nr 4, p 54 (USSR)

ABSTRACT: The meeting was held from 16th to 19th February, 1959 at the Nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut (Research Institute for Automobiles and Buses, NAMI). Representatives of car factories, research institutes and members of teaching institutes heard 24 lectures and reviews. The chief designer of NAMI, A.A. Lippart, reviewed its movements in car suspensions, and many papers dealt with rubber-pneumatic suspensions. A.M. Gorelik (NAMI) discussed pneumatic rubber-cord suspensions, drawing attention to their advantages, and also spoke of their use abroad. B.A. Akopyan (IAZ) referred to their adoption in public transport e.g. in

Card 1/2

the bus IAZ-695B. V.A. Galashin (MVTU) reviewed the work on rubber-cord diaphragms for car suspensions, which has been carried out in the Leningrad Tyre Factory, and the work of MVTU in. Bauman. Further lectures were read by R.L. Qualitser (NII ShP), M.G. Parkhilovskiy (GAZ), V.B. Teinbain etc. which dealt with experimental work on car suspension, their efficiency under various conditions etc. B.Y. Rotenberg's discussion on the use of computers for engineering calculations was of outstanding interest. Ia.M. Pyatitskiy discussed the road-holding properties of cars.

Card 2/2

KAZANNIKOV, I.; KHOMICH, P.; PARKHIMCHIK, N.

Only one is responsible for everything. Okhr. truda i sots.  
strakh. 5 no.7:28 J1 '62. (MIRA 15:7)

1. Glavnyy tekhnicheskii inspektor Belorusskogo respublikanskogo soveta profsoyuzov (for Kazannikov).
2. Tekhnicheskii inspektor Belorusskogo respublikanskogo soveta profsoyuzov (for Khomich).
3. Tekhnicheskii inspektor Minskogo oblastnogo soveta profsoyuzov (for Parkhimchik).

(AGRICULTURE-HYGIENIC ASPECTS)

PARKHIMOVICH, S.

In the fields and on the farms of a school enterprise. 1941.-1944.  
obr. 21 no.2:11 1944. (CIA 17:9)

1. Direktor (shkolskogo sel'skogo professional'no-tekhnicheskogo  
uchilishcha i.e.14, belorusskaya shk.).



KHODOVLES, V.Va; PAKHIMOVICH, S.P.

Liver abscess. Zdrav, bel. 8 no.6:64 Je'62. (MIA 1c:4)

1. Iz khirurgicheskogo otdeleniya Starodorozhskoy rayonnoy  
bol'nitsy (glavnyy vrach V.V.Karulis)  
(LIVEL-ABSCESS)

Structure and mechanical ...

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S/571/60/000/006/008/011  
E091/E435

temperature was controlled by means of a photoelectric pyrometer designed by the Experimentatnyye masterskiye (Experimental workshops) of the Moskovskiy institut stali im. I.V. Stalina (Moscow Steel Institute imeni I.V. Stalin) and by a thermoelectric pyrometer TEP-1 (TEP-1) designed by the Laboratoriya induktsionnogo nagreva (Induction Heating Laboratory) of the Fiziko-tekhnicheskogo institut AN BSSR (Physicotechnical Institute, AS Belorussian SSR). The annealed structure was studied by means of metallographic and X-ray analyses, the change in mechanical properties was assessed from the strength and plasticity results obtained during upsetting in the press. It was found that the temperatures of commencement and completion of recrystallization during induction heating are displaced to a higher range. The rise in recrystallization temperature is the greater, the higher the rate of heating. For alloy VT-5, this temperature rise is 150 to 200°C for a heating rate of 25°C/sec and 350 to 400°C for a heating rate of 300°C/sec. For the same heating rates the temperature rise for the alloy VT-1-1 and VT-3-1 is 80 to 100°C and 150 to 200°C respectively and for the alloy VT-3-1 it is 50 to 70°C and Card 2/4

Structure and mechanical

30944  
S/571/60/000/006/008/011  
E091/E435

150 to 200°C respectively. The higher annealing temperature used in induction heating is compensated for by the high heating rate and by the fact that soaking is not required and that intense grain growth does not occur. As the degree of deformation has little influence on the grain size of induction heated specimens, a more homogeneous structure is obtained throughout the section of the deformed metal. The plasticity and strength are higher in the case of induction annealing, particularly if there is a great increase in the plasticity of the alloy VT-3-1, which is very difficult to deform. The following parameters are recommended for annealing alloy VT-5 to be heated to 1050 to 1100°C at a rate of 25°C/sec or to 1100 to 1150°C at 50°C/sec, alloy VT-1-1 to be heated to 800°C at 25°C/sec or to 900°C at 150°C/sec, alloy VT-3-1 to be heated to 1100°C at 50°C/sec. There are 12 figures, 1 table and 6 references 4 Soviet and 2 non-Soviet. The reference to an English language publication reads as follows Ref.4. Obinata J. Nischimura, J. Inst. of Metals, v.84, 1956.

Card 3/4

Structure and mechanical

S/571/60/000/006/008/011  
E091/E435

Table 1.

Alloy	Al	Cr	Mo	Fe	Si	N <sub>2</sub>	H <sub>2</sub>	C	Type of alloy
VT-5	4.9	-	-	-	0.12	-	-	-	one-phase
VT-1-2	-	-	-	0.07	0.016	0.017	0.005	0.041	"
VT-3-1	4.2	1.6	1.2	0.20	0.02	0.04	0.02	0.05	two-phase

Card 4/4

PARKHIMOVICH, V. I.

18.7500

77168  
307/129-63-1-16/82

AUTHORS: Eadyako, M. N., Loyko, Ya. M., Pavlyukevich, B. L.  
(Candidates of Technical Sciences), Parkhimovich, V. I.  
(Engineer)

TITLE: Recrystallization Diagrams for Induction Heating

PERIODICAL: Although methods of annealing by induction heating have not been widely studied, research in the Soviet Union indicates their effectiveness in treating deformed metals and alloys, showing such advantages as (1) a fine and homogeneous structure, (2) speed, and (3) possibility of automation. In comparing the above method with regular furnace heating, the authors consider heating speed and not the holding period to be the decisive factor. Recrystallization of the following cold-deformed specimens was studied: (a) commercial iron, heated in high frequency furnace MGZ-102 to 600, 700, 800, 900, 1,000 and 1,100° C at mean heating speeds of 10, 20, 40, 60 and 80 C/sec; (b) 1Kh18N9T-steel (C, 0.1-0.8; Mn, 2.0; Cr, 17.0 to 20.0; Ni, 8.0 to 11.0;

Card 1/8



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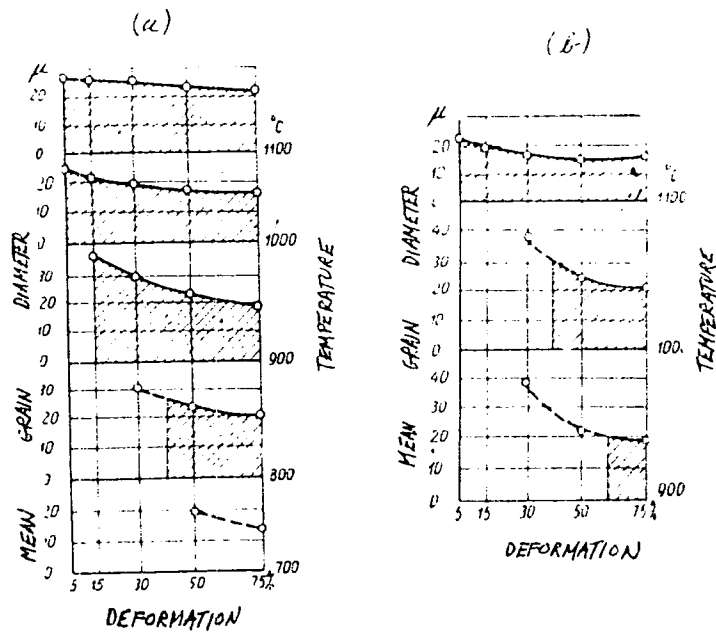


Fig. 1. Recrystallization diagram of commercial iron (a), at a speed of induction heating of  $50^{\circ}\text{C/sec}$ , and (b) at  $650^{\circ}\text{C/sec}$  heating speed.

Card 3/8

Recrystallization Diagrams for Induction  
Heating

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SOV/129-60-1-16/22

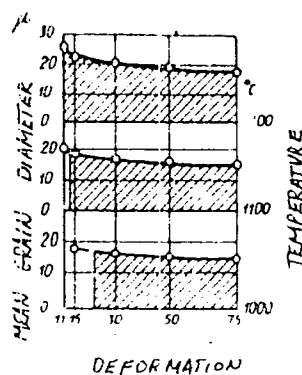
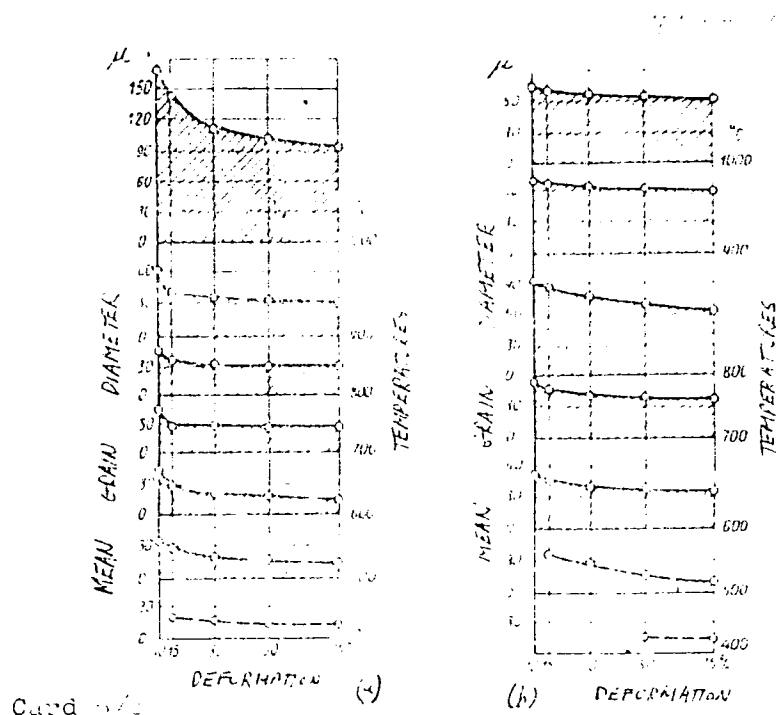


Fig. 2. Recrystallization diagram  
of 1Kh18N9T-steel at heating speed  
of 60° C/sec.

Card 4/8





Recrystallization Diagrams for Induction  
Heating

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changes within the 1,000-1,200° C range hardly influence the grain size; (c) in copper at 1,000° C and a heating speed of 50° C/sec the grain growth is as pronounced as in regular furnace heating (see Fig. 3). (3) Effect of heating rates on grain size: (a) in commercial iron, although the grain size is hardly affected by the rate of heating, the latter considerably influences the temperature of the beginning of crystallization (see Fig. 1 (a) and (b)); (b) in steel, accelerated heating rates conspicuously inhibit grain growth; recrystallization begins at 1,000° C; (c) in copper, grain size is influenced by heating speeds only at 1,000° C (see Fig. 3). Recrystallization starts at 400° C with heating speeds of 40° C/sec and 500° C/sec. The authors recommend the following heating rates: (a) commercial iron, to 1,000° C at 50° C/sec or to 1,100° C at 200 to 400° C/sec; (b) 18NiTi-steel, to 1,000° C at 40 to 60° C/sec; (c) copper, 400 to 1,000° C at 40° C/sec or

Card 6/8

Recrystallization Diagrams for Induction  
Heating

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SCV:17-00-1-0-1

600 to 700° C at 200 to 500° C/sec. These rates insure complete recrystallization and a minimum grain size regardless of the degree of deformation. The authors conclude in regard to induction heating versus furnace heating as follows: (1) The temperature of the recrystallization threshold increases with increased speeds of induction heating and is considerably higher than in furnace heating; (2) Grain growth, as a result of lower rates of deformation, is slower at elevated temperatures which have a slighter effect than in furnace heating; (3) The absence of a clearly marked maximum grain size at critical rates of deformation is due to the peculiarities of induction heating and the short period of holding at maximum temperatures. The formation of recrystallization centers occurs considerably faster than the grain growth; (4) The speed of induction heating has no appreciable effect on grain size; The latter decreases slightly with increased speeds at similar temperatures and deformation rates; (5) Recrystallized structure is finer than in furnace heating as a result

Card 7/8

Re crystallization Diagrams for Isotactic  
Heating

Fig. 1  
DSC, 100°C/min.

of the simultaneous formation of a great number of  
re crystallization centers at elevated annealing  
temperatures. There are 3 figures; and 1 Series  
references.

Carlin, W.

40589

S/137/62/000/008/039/065  
A006/A101

18.1285

AUTHORS: Bodyako, M. N., Loyko, Yu. M., Parkhimovich, V. I.

TITLE: The structure and the mechanical properties of titanium alloys during induction annealing

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1962, 36, abstract 8I222 ("Sb. nauchn. tr. Fiz -tekh. in-t AN BSSR", 1960, no. 6, 130 - 149)

TEXT: The authors studied strength properties of titanium alloys BT-5 (VT-5), BT-3-1 (VT-3-1) and BT-3-1 (VT-3-1) after induction heating of cold-deformed specimens at various heating rates ranging from 25 to 300 degree/sec., and heating temperatures from 700 - 1,200°C. During induction heating the temperatures of beginning and completed recrystallization are shifted to the side of higher temperatures to a degree corresponding to the heating rate. The metallographical investigation has shown that the magnitude of grains depends little on the deformation degree, but depends considerably upon the annealing temperature. At higher heating rates, however, a strong increase of the grain size does not take place. As a result of induction heating ductility and strength increase

Card 1/2

SOV/ACIB  
PHASE I BOOK EXPLICATION

Academy of Sciences USSR, Institute of Zoology, Leningrad.  
Scientific Papers of the Zoological Institute, Academy of Sciences USSR, 1953, 235 p. Russian and English text. 1,100 copies printed.

[illegible]

of 31 articles covers the following

[illegible][illegible]

Effect of  
Plasma from Porcine  
for Forging Bodies of Revolution  
Sverdlovsk, V. P., B. T. Freestroy, and A. V. Vishkov.

the flash-outer image on the  
Sverdlovsk, V.P., K.T. Proskov, and N.Ye. Gavrilov, on the  
side of flash in drop-firing lines  
of acceleration and forces in

**Author:** A. T. Pashkov, A. V. Dobrynina  
**Impact Upsetting**  
**Efficiency of Impact in Upsetting Steel Blanks**  
**Effect of Ratios on a Vertical Upsetter**

### Measuring Unit Pressures in the No Cavities

Effect of Rate of Strain on Deformation at Close-to-Nominal Temperature

Bohrovskiy, G. I.: Effect of Temperature and  
on the Physical Properties of Silver Chloride  
Neutralization

QUEST. E.V. -  $\frac{h \cdot A \cdot \pi \cdot \rho \cdot g}{4 \cdot \pi \cdot r^2 \cdot \rho \cdot g}$  ALLOT [55.25] IN, 2000, -  
of 1001 in the 8100-95 ALLOT [55.25] IN, 2000, -  
3621, 1.75542]

\*DOROT, L.V. and S.L. Investigation of the effect of chemical treatments on the vegetative properties of *C. glutinosa* L. from 19th and 20th seeds

and Correction of the records; and T.I. PAVLENKO, M.S., Yu.M. ZOLOTOV, B.L. FAYL'KOVICH, and V.A. POLOKH, Engineers in Charge of Assembly of Copper Wire HSh-700.

General: 70.0. Methods for Development of New Processes in  
Quantity Current: Heating

Investigation of Surface  
Reactions of Fe-0.1% and Fe-0.5% Carbon Alloys  
Quality in Thermocycling of Carbide Alloys

Reichbath, J.G., and J.N. Oleschovskii. <sup>1954</sup> Measuring the Mechanism of Light-Voltage Pulse Discharge by the Method of Time Scanning of the Discharge Zone

Yakrabertich, I.O., and N.M. Oleinovich. On the Problem of the  
Phenomena [Occurring] on Electrons During Electric-Pulse Discharge  
in the Air at Atmospheric Pressure

On Phosphorus located  
on Electrodes in Electric Pulse-Discharge Through a Thin Metal  
Membrane, I. O. and N. M. Olechnovich.

### Part 1.4. Dependence of Electro-Emission Effect on Electric Conditions of Electro Discharge

Revelation, B.Ya. Problems in the history of the  
and T.S. Iobachovsky. Investigation of the

EDITORIAL, I.A.U., SAN ANTONIO, TEXAS  
COUNCIL ON THE STATUS OF WOMEN

BODYAKO, M.N.; LOYKO, Yu.M.; PAVLOVICH, V.I.

Lack of uniformity in the distribution of deformations in the  
VT-5 titanium alloy. Dokl.AN BSSR 4 no.1:28-31 Ja '60.  
(MIRA 13:6)

1. Predstavleno akademikom AN BSSR V.P. Severdenko.  
(Titanium alloys)

PARKHIMOVICH, V.I.; BODYAKO, M.N.

Formation of scale on the VT-5 titanium alloy in induction heating.  
Dokl. AN BSSR 3 no.5:211-212 My '59. (MIRA 12:10)

1. Predstavleno akademikom AN BSSR V.P. Severdenko.  
(Titanium alloys--Thermal properties) (Induction heating)



PARKHIMOVICH, V. I.

Cand Tech Sci - (diss) "Recrystallization annealing of titanium alloys in induction heating." Minsk, 1961. 12 pp; (Academy of Sciences Belorussian SSR, Technical Physics Inst); 220 copies; price not given; (KL, 7-61 sup, 243)

RADZYAKA, M.M.; OSTAPCHIK, S.A. [Astapchyk, S.A.]; PARKHIMOVICH, V.I.

Recrystallization of nickel under induction heating. Vestsi AN  
BSSR Ser. fiz.-tekh. nav. no. 1:120-125 '61. (MIRA 14:4)  
(Nickel—Heat Treatment) (Crystallization)

L 09143-67 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW  
ACC NR: AR6027449 SOURCE CODE: UR/0276766/000/004/B029/B029

AUTHOR: Gorev, K. V.; Loyko, Yu. M.; Parkhimovich, V. I. 35

TITLE: Ausforming 45 steel in combination with impact deformation

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 4B198

REF SOURCE: Sb. Metallovedeniye i term. obrabotka met. Minsk, Nauka i tekhnika, 1965, 95-98

TOPIC TAGS: metal ausforming, martensite, metal deformation, yield stress

ABSTRACT: Development of recrystallization in the deformation process during ausforming of steel was minimized by using special equipment for impact upsetting with subsequent rapid cooling in water. The authors studied the effect which temperature and degree of deformation have on the size of martensite needles, residual stresses of the first and second order, block size, yield stress, breaking stress and hardness of 45 steel after ausforming and ordinary hardening, as well as after protracted tempering at 300°C. Comparative results are given for ordinary hardening and ausforming at temperatures of 800 and 1000°C and also after subsequent annealing at 300°C. 2 illustrations. [Translation of abstract]

SUB CODE: 11

UDC: 621.785

Card 1/1 not

ACC NR: AR6027512

SOURCE CODE: UR/0137/66/000/004/I068/I068

AUTHOR: Gorev, K. V.; Loyko, Yu. M.; Parkhimovich, V. I.

TITLE: High temperature thermomechanical treatment of 45 steel by impact deformation

SOURCE: Ref. zh. Metallurgiya, Abs. 41459

REF SOURCE: Sb. Metallovedeniye i term. obrabotka met. Minsk. Nauka i tekhnika, 1965, 95-98

TOPIC TAGS: thermomechanical property, metal deformation, martensite steel / 45 steel

TRANSLATION: The effect of temperature and degree of deformation on the martensitic needle size, block dimensions,  $\sigma_s$ ,  $\sigma_b$  and  $H_V$  of 45 steel was studied after high temperature thermomechanical treatment and normal quenching, and after additional tempering at 300°C. Deformation was carried out at rates of 300-600 sec<sup>-1</sup> in varying amounts (0-100%) for deformation temperatures ranging from  $A_c$  to 1000°C. Both high temperature thermomechanical treatment and tempering produced finer needles of martensite than did quenching. First order residual stresses were greater after high temperature thermomechanical treatment than after quenching. Second order stresses after high temperature thermomechanical treatment and quenching were identical. After high temperature thermomechanical treatment and subsequent tempering at 300°C, the values of  $\sigma_s$

UDC: 669.14.018.26:621.785

Card 1/2

ACC NR: AR6027512

were higher than after normal heat treatment;  $\sigma_b$  only was slightly higher after high temperature thermomechanical treatment, than after ordinary quenching. Thermomechanically processed samples had higher values of  $H_v$ , than for those ordinarily quenched.

The following high temperature thermomechanical treatment cycle was recommended for impact deformation of 45 steel: temperature of deformation--800-900°C, degree of deformation--60-100%. V. Olenicheva.

SUB CODE: 11,13

Card 2/2

AUTHOR: Parkhit'ko, V.

89-12-15/29

TITLE: In the **Physics** Institute of the AN Ukrainian SSR  
(V Institute fiziki Akademii nauk USSR)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 12, pp. 554-557 (USSR)

ABSTRACT: This institute was founded in 1929. At present papers on the subjects of nuclear physics, molecular physics, theoretical physics, physics of semiconductors, electronics and spectroscopy are carried out there.

For investigations of nuclear physics an electrostatic generator up to 2.5 MeV, a cyclotron (deuterons up to 16 MeV) and a low volt neutron generator are at disposal. A number of recording mechanisms, e.g. a spherical ionization chamber for the detection of neutrons,  $\gamma$ -scintillation spectrometers, multichannel amplitude- and time - analyzers etc. were constructed and built by the institute itself.

The latest extensive researches in the neutron physics were the determination of  $\gamma$ -energy in n-n' processes and the determination of the effective cross-section of the n-2n reactions.

CARD 1/2

Investigations on the angular distribution of the protons

AUTHOR: Parkhit'ko, V. 89-1-26/29

TITLE: The Work Carried out by Uzhgorod Scientists (Raboty uchenykh Uzhgoroda).

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 1, pp. 107 - 108 (USSR)

ABSTRACT: The following works dealing with nuclear investigation are at present being carried out:

1. Determination of the excitation function of  $\gamma$  - reactions. The linear accelerator of Khar'kov is being used.
2. Theoretical and experimental work for geological investigations carried out with mineral oil + water.
3. Investigation of the natural mineral sources of the strip of land extending in front of the Carpathian Mountains in order to determine the degree of their radioactivity and their usefulness for medical purposes. The radon content of 20 of them has already been investigated. Weak activities were found.
4. Theoretical work in the field of quantum electrodynamics is carried out in the theoretical institute.
5. After the laboratory for radioactive isotopes will have been completed, also work for other faculties in this field will be taken over. There is 1 figure.

~~Card~~ 1/2

21(0)

AUTHOR: Parkhit'ko, V.

SOV/89-6-4-16/27

TITLE: The Fifth Session of the Scientific Council of the Joint Institute of Nuclear Research (Pyataya sessiya Uchenogo soveta Ob'yedinennogo instituta yadernykh issledovaniy)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 4, p 479 (USSR)

ABSTRACT: The fifth session of the Scientific Council of the Ob'yedinenny institut yadernykh issledovaniy (Joint Institute of Nuclear Research) was held from January 14 to 17, 1959. Lectures were held on the following important papers, which were also discussed: Professor V. P. Dzhelepov spoke about the results obtained by the work carried out by the Laboratoriya yadernykh problem ~~Laboratory~~ of Nuclear Research). Investigations were carried out of: the elastic and inelastic scattering of nucleons on polarized and non-polarized particles, scattering of  $\pi$ -mesons on nucleons, processes of weak interaction in the presence of  $\mu$ -mesons, and the properties of  $\mu$ -mesons. The Director of the Laboratoriya teoreticheskoy fiziki (Laboratory for Theoretical Physics) Academician N. N. Bogolyubov, reported that the following subjects were investigated: general scattering theory, field theory, theory

Card 1/3



SOV/89-6-4-16/27

The Fifth Session of the Scientific Council of the Joint Institute of Nuclear Research

of elementary particles, nucleon structure, dispersion relations, use of the theory of superconductivity in investigations of nuclear matter. Academician V. I. Veksler reported on the work carried out by the Laboratory for High Particle Energies. A considerable amount of work was carried out for the purpose of fixing the normal operational conditions for the 10 Bev synchrophasotron in order to be able, above all, to work day and night with this device. Moreover, a number of new physical devices was developed. The Scientific Council praised the work performed by this laboratory. The results obtained by the most important work carried out by these 3 laboratories were outlined at the 2. Geneva Atomic Conference. I. M. Frank, Corresponding Member, AS USSR and Holder of the Nobel Prize, spoke about the progress made in building the impulse reactor at the Laboratoriya neytronnoy fiziki (Neutron-Physics Laboratory). This reactor differs essentially from a normal reactor and is especially well suited for work to be carried out in the field of neutron physics.

Card 2/3

G. N. Flerov, Corresponding Member, AS USSR, gave a report

SOV/89-6-4-16/27

The Fifth Session of the Scientific Council of the Joint Institute of  
Nuclear Research

about nuclear reactions with highly ionized particles. Work was carried out jointly by the USSR and the participating countries in the Laboratory of Nuclear Physics. The Scientific Council approved and confirmed the scientific building plans for 1959. The management of the Institute submitted a plan for the improvement of collaboration among the participants. The Scientific Council expressed its gratitude especially to the following persons: D. I. Blokhintsev, Director of the Institute, Corresponding Member, AS USSR; **Vaclav** Votruba, Deputy Director and Corresponding Member of the Czechoslovakian Academy of Sciences, and Professor Marian Danycz (Poland), Deputy Director.

Card 3/3

21(0)

SOV/89-6-4-17/27

AUF HOR:

Parkhit'ko, V.

TITLE:

Meeting of the Committee of Authorized Representatives of Governments Which Are Members of the Joint Institute of Nuclear Research (Soveshchaniye Komiteta polnomochnykh predstaviteley pravitel'stv gosudarstv - chlenov Ob'yedinennogo instituta yadernykh issledovaniy)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 4, p 480 (USSR)

ABSTRACT:

The committee of authorized government representatives held a meeting from January 19 to January 21, 1959. A report on the activities of the Ob'yedinennyi institut yadernykh issledovaniy (Joint Institute of Nuclear Research) in 1958 was delivered by D. I. Blokhintsev, Corresponding Member, AS USSR. A report on the budget, the allocation of posts, and the building plans for 1959 was delivered by V. N. Sergiyenko, the administrative head of the Institute. On the first day of the conference all delegates spoke and submitted a number of suggestions for the improvement of the work further to be carried out by the Institute. The management and the staff of collaborators of the Institute were thanked in the name of all delegates for the work hitherto carried out. On the

Card 1/3